# Exhibit 4



## Case 1:20-cv-00034-ADA Document 44-5 Filed 03/20/20 Page 2 of 13



## UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231 www.uspto.gov

	APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
8	09/164,777	10/01/1998	MIKI MULLOR	REINC4237.01	7068
	75	590 01/15/2002			
	SPENCER AT			EXAMI	NER
		RK AVENUE NW		HEWITT II,	CALVIN L
	WASHINGTO	N, DC 200053955	<i>b</i>	ART UNIT	PAPER NUMBER
				2161	12
				DATE MAILED: 01/15/2002	•

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 07-01)

H.6

*7	Case 1:20-cv-00034-ADA Docur	nent 44-5 Filed 03/20/20	Page 3 of 13
100		Application No.	Applicant(s)
	~	09/164,777	MULLOR ET AL.
	Office Action Summary	Examiner	Art Unit
		Calvin L Hewitt II	2161
Period fo	<ul> <li>The MAILING DATE of this communication app</li> <li>Reply</li> </ul>	ears on the cover sheet with the c	orrespondence address
THE N - Extension after S - If the p - If NO - Failure - Any re	DRTENED STATUTORY PERIOD FOR REPLY MAILING DATE OF THIS COMMUNICATION. Is sions of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. Poeriod for reply specified above is less than thirty (30) days, a reply period for reply is specified above, the maximum statutory period we to reply within the set or extended period for reply will, by statute, apply received by the Office later than three months after the mailing dipatent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be time within the statutory minimum of thirty (30) day will apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).
1)⊠	Responsive to communication(s) filed on 14 N	November 2001 .	×
2a)□		is action is non-final.	
3)□	Since this application is in condition for allowards closed in accordance with the practice under		
Dispositio	on of Claims		
4)	Claim(s) 1-23 is/are pending in the application	on.	
4	4a) Of the above claim(s) is/are withdraw	vn from consideration.	
5)	Claim(s) is/are allowed.		
6)🖂	Claim(s) 1-23 is/are rejected.	<u> </u>	
7)	Claim(s) is/are objected to.		
8)	Claim(s) are subject to restriction and/o	r election requirement.	
Application	on Papers		
9)□ T	he specification is objected to by the Examine	r.	la la
10)□ T	he drawing(s) filed on is/are: a) accept	oted or b) objected to by the Exa	miner.
	Applicant may not request that any objection to the	e drawing(s) be held in abeyance. S	ee 37 CFR 1.85(a).
11) 🗌 T	he proposed drawing correction filed on	is: a) ☐ approved b) ☐ disappro	oved by the Examiner.
	If approved, corrected drawings are required in rep	bly to this Office action.	M.
12) T	he oath or declaration is objected to by the Ex	aminer.	5
Priority u	nder 35 U.S.C. §§ 119 and 120		
13)	Acknowledgment is made of a claim for foreign	priority under 35 U.S.C. § 119(a	a)-(d) or (f).
a)[	☐ All b) ☐ Some * c) ☐ None of:		
	1.☐ Certified copies of the priority documents	s have been received.	
	2. Certified copies of the priority documents	s have been received in Applicati	on No
	<ol> <li>Copies of the certified copies of the prior application from the International Buree the attached detailed Office action for a list</li> </ol>	reau (PCT Rule 17.2(a)).	Companies de la companie de la comp
	cknowledgment is made of a claim for domesti		
a)	☐ The translation of the foreign language pro	visional application has been rec	eived.
Attachment	cknowledgment is made of a claim for domesti	ic priority under 33 0.5.C. 99 120	anu/01 121.
1) Notice	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO-1449) Paper No(s) <u>1</u>	5) Notice of Informal I	y (PTO-413) Paper No(s) Patent Application (PTO-152)

Art Unit: 2161

Page 2

### Status of Claims

Claims 1-23 have been examined.

## Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 11, 12, 15 and 16 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claims 11, 12 and 15 are rejected as flash memory is a type of EEPROM.

Flash memory can be used as a computer BIOS. Therefore, a computer BIOS

would not contain an EEPROM and/or ROM section.

Claim 16 is rejected because a key cannot be simultaneously "unique" and "pseudo-unique".

Art Unit: 2161

Page 3

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

 Claims 20 and 21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 20 recites, "loading a software program residing in volatile memory area of the computer". This limitation would not be clear to one of ordinary skill as the software would have to be loaded a priori in order to reside in volatile memory.

Claim 21 is rejected because it depends from claim 20.

## Claim Rejections - 35 USC § 103

- 6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Art Unit: 2161

Page 4

 Claims 1-23 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Misra et al., U.S. Patent No. 6,189,146, Goldman et al., U.S. Patent No. 5,684,951. and Ewertz et al., U.S. Patent No. 5,479,639.

Misra et al. teach a system and method for software licensing that comprises:

- selecting a program from volatile memory (figure 2)
- using data stored in various memory locations to implement the system (figure 2; column 5, lines 2-67)
- using an agent to set up a verification structure in computer memory where structure data includes a license record (column 4, lines 14-20 and 49-67; column 11, lines 45-59; column 12, lines 8-31)
- verifying and acting on the program according to the verification structure (e.g. software license) (column/line 13/65-14/53; column/line 14/54-17/40)
- a licensing authentication bureau in a two-way connection with a
  computer that handles requests for licenses (where license data
  includes computer identification and license record contents),
  encrypts a request for license (e.g. license) using computer
  identification, performs license validation and transfers a license to
  a computer (figures 1 and 3-8; column 6, lines 50-64; column 9,

Art Unit: 2161

Page 5

- lines 40-50; column/line 11/60-12/27; column/line 13/65-14/52;
   column 15, lines 37-49)
- a license that contains predetermined information (column 10, lines 60-67; column 11, lines 1-24)
- storing a license record in non-volatile memory (column 12, lines 8-27)
- comparing licenses to determine validity and restricting the program's operations if a license is determined to be invalid (column 14, lines 30-51)
- encryption using an identification of a computer that is a unique key (column 15, lines 37-49)

Regarding the storage of encrypted licenses, Misra et al. teach licenses that are encrypted using a unique key as they are placed in storage (column 8, lines 35-52). Therefore, it would have been obvious to one of ordinary skill of the art to allow user nodes to store licenses in encrypted form for additional security. In addition, as Misra et al. implement their system using various computer system memory such as RAM (e.g. volatile), ROM (which houses a BIOS), portable and hard disk memory (column 5, lines 37-67) it would have been obvious to perform encryption processes using the appropriate memory given the characteristics of the target system (figures 1 and 2). Misra et al. also teach

Art Unit: 2161

encryption keys and programs ("agent") used in the license collation process that belong to various parties (column 8, lines 35-52; column 15, lines 37-54).

Therefore, it would have been obvious to one of ordinary skill of the art to store these keys in non-volatile memory as these keys are used to securely communicate between and identify parties, as well as access encrypted data.

Misra et al., however, do not teach pseudo-unique keys nor constructing license records within a computer BIOS. Goldman et al. teach pseudo-unique keys (abstract) while, Ewertz et al. teach of expanding BIOS memory to store identification and/or configuration data such as software licenses (column 3, lines 15-40; column/line 11/3-12/14). Therefore, it would have been obvious for one of ordinary skill of the art to combine the teachings of Misra et al., Goldman et al. and Ewertz et al.. Recall, Ewertz et al. teach of expanding non-volatile memory (e.g. BIOS) ('639, column 3, lines 15-40) for maintaining data such as software licenses. Hence, it would have been obvious to one of ordinary skill to use the BIOS to store licenses in the Misra et al. system as they teach of users storing license data in persistent- non-volatile storage ('146, column 12, lines 8-27). Also pseudo unique keys can be issued, on a temporary basis (say), ('951, abstract), to encrypt licenses ('146, column 13, lines 42-48). This allows a client to access secured data without comprising the security of the larger system.

Page 6

Art Unit: 2161

Page 7

## Conclusion

- 8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:
  - Edenson et al. teach a system for protecting copyrighted program material using a BIOS
  - Fette et al. teach a programmable radio and operating software in accordance with a license
  - Steinberg et al. teach software branding
  - Smith et al. teach a system for distributing, registering and purchasing software over a network using an agent program embedded in each software application
- 9. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Calvin Loyd Hewitt II whose telephone number is (703) 308-8057. The Examiner can normally be reached on Monday-Friday from 8:30 AM-5:00 PM.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, James P. Trammell, can be reached at (703) 305-9768.

Art Unit: 2161

Page 8

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

c/o Technology Center 2100

Washington, D.C. 20231

or faxed to:

(703) 746-7239 (for formal communications intended for entry),

(703) 746-7238 (for after-final communications),

or:

(703) 746-7240 (for informal or draft communications, please label

"PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-3900.

Calvin Loyd Hewitt II

January 7, 2002

ANCORA 00000429

Primary Examiner

Notice of References Cited	Application/Control No. 09/164,777	Applicant(s)/Patent Under Reexamination MULLOR ET AL.		
Notice of References Cited	Examiner	Art Unit	3370 G 74000	
	Calvin L Hewitt II	2161	Page 1 of 1	

#### **U.S. PATENT DOCUMENTS**

* .	Document Number Country Code-Number-Kind C		Date MM-YYYY	Name	Classific	ation
	À	US-5,479,639-A	12-1995	Ewertz et al.	395	430
	В	US-6,189,146-A	02-2001	Misra et al.	717	11
	С	US-6,067,582-A	05-2000	Smith et al.	710	5
	D	US-6,000,030	12-1999	Steinberg et al.	713	200
	Е	US-6,052,600-A	04-2000	Fette et al.	455	509
	F	US-6,198,875-A	03-2001	Edenson et al.	386	94
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#### FOREIGN PATENT DOCUMENTS

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### NON-PATENT DOCUMENTS

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\*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).) Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

U.S. Patent and Trademark Office PTO-892 (Rev. 01-2001)

**Notice of References Cited** 

Part of Paper No. 12

PTO/SB/08A (08-00)

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Ü **U.S. PATENT DOCUMENTS** U.S. Patent Document Name of Patentee or Applicant Date of Publication of Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear Kind Code<sup>2</sup> of Cited Document Cited Document MM-DD-YYYY (if known) 5,754,763 Bereiter 5/19/1998 5,758,068 Brandt et al. 5/26/1998 5,790,664 Coley et al. 8/4/1998 5,758,069 Olsen 5/26/1998 5/18/1999 5.905.860 Olsen et al. 2/14/1995 5.390.297 Barber et al. 6,173,446 Khan et al. 1/9/2001 4,903,296 Chandra et al. 2/20/1990 6,298,138 Gotoh et al. 10/2/2001 6,192,475 Wallance 2/20/2001 8/77/2001 6,272,636 Neville et al. 6,055,503 Horstmann 4/25/2000 6,073,256 Sesma 6/6/2000 12/21/1999 6,006,190 Baena-Arnaiz et al. 6,078,909 Knutson 6/20/2000 6,243,468 Pearce et al. 6/5/2001 6,189,146 Misra et al. 2/13/2001 5,671,412 Christiano 9/23/1997 5,826,011 Chou et al. 10/20/1998 6,023,763 2/8/2000 Grumpstrup et al.

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xaminer Initials*		Office <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>5</sup> (if known)	or Applicant of Cited Document	Cited Document MM-DD-YYYY	Where Relevant Passages or Relevant Figures Appear	T <sub>6</sub>
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**U.S. PATENT DOCUMENTS** U.S. Patent Document Name of Patentee or Applicant Date of Publication of Pages, Columns, Lines, Where Relevant Cite No.1 Passages or Relevant Figures Appear of Cited Document Cited Document MM-DD-YYYY 6,226,747 5/1/2001 Larsson et al. 10/3/2000 6,128,741 Goetz et al. 5/8/1990 4,924,378 Hershey et al. 5,386,369 Christiano 1/31/1995 6,233,567 Cohen 5/15/2001 4,866,769 Karp 9/12/1989 6,021,438 Duvvoori et al. 2/1/2000

				FOREIG	N PATENT DOCU	MENTS		
_	Cite No.1	Foreign Patent Document			Name of Patentee	Date of Publication of	Pages, Columns, Lines,	
Examiner Initials*		Office <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>5</sup> (if known)	or Applicant of Cited Document	Cited Document MM-DD-YYYY	Where Relevant Passages or Relevant Figures Appear	Тв
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